ESO No. 933

LEASING vs. PURCHASING AGRICULTURAL EQUIPMENT

BY

DR. RICHARD D. DUVICK
EXTENSION ECONOMIST, FARM MANAGEMENT
DEPARTMENT OF AGRICULTURAL ECONOMICS AND RURAL SOCIOLOGY
THE OHIO STATE UNIVERSITY

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Leasing vs. Purchasing Agricultural Equipment

Leasing is a common tool in agriculture, primarily for land.

"Leasing Boom" taken place in general economy since WW II.

- Increased capital spending
- Prosperity
- Technological innovation
- Tax legislation

In general, equipment leasing has not been a major factor in agriculture. But many groups, including equipment manufacturers, continue to view agriculture as a fertile area for leasing.

This session is intended to overview major issues in leasing vs. purchasing agricultural equipment ... from both the lessee's and lessor's perspective.

Leasing vs. Purchasing Agricultural Equipment

Objectives:

1. To review the concept of leasing

2. To examine reasons for and against leasing

3. To review major types of leases, including IRS classifications

4. How to evaluate a lease:
   a) should I (the lessee) lease or borrow?
   b) should I (the lessor) lease or lend?

5. Discuss current sample lease (vs. borrow) offerings

Equipment Leasing - What Is It?

LEASE

1) A way to finance the purchase (and/or use) of capital equipment.

2) In simple terms it involves:

A LESSOR, who owns the equipment;

AND A LESSEE, who uses the equipment, in exchange for rent payments

3) A contract whereby the owner of an asset (the lessor) conveys to the user of the asset (the lessee) the right to use the asset for a specified period in exchange for a promise to pay a series of (rental) payments over the leasing period.

LEASE CONTRACT SPECIFIES:

1) The leasing period
2) Amount and timing of lease payments
3) Lessee's responsibilities for taxes, insurance, etc.
4) Lessee's rights of purchase or re-lease
5) Lessor's responsibilities and rights

WHY ANOTHER SURGE OF INTEREST IN LEASING?

- DEPRESSED PROFITS IN FARMING
- DEPRESSED SALES OF FARM MACHINERY
- SPECIALIZED FACILITIES
- INCREASING INVESTMENT COSTS
- HIGH AND FLUCTUATING INTEREST RATES
- "SAFE HARBOR" RELAXES TAX RULES ON LEASING

TYPES OF AGRICULTURAL EQUIPMENT LEASED BY VARIOUS LESSORS, 1980

ITEM	BANKS	MCHY & EQUIP SUBSIDIARIES	INDIVIDUALS
TRACTORS	5 %	25 %	17 %
AUTOS	2	-	-
TRUCKS	2	-	7
IRRIGATION EQUIP.	44	3	23
GRAIN STORAGE & HANDLING	12	1	10
HARVESTING EQUIP.	15	19	6
IMPLEMENTS & OTHER MCHY.	10	12	5
LIVESTOCK BLDGS. & EQUIP.	1	1	10
LIVESTOCK	-	25	21
NON-PRODUCTION ITEMS	9	13	1
TOTAL	100 %	100 %	100 %
PERCENT OF TOTAL	16.8 %	53.4 %	29.8 %

SOURCE: ADAIR, A.L., J.B. PENSON, AND M. DUNCAN, "MONITORING LEASE-FINANCING IN AGRICULTURE", ECONOMIC REVIEW, FEDERAL RESERVE BANK OF KANSAS CITY, JUNE, 1981.

Why Lease?

Possible Advantages to Customer

- Lower Cost by Full Use of Tax Benefits
- Convenience
- Fixed Rate Financing
- Alternative Source of Capital
- Longer Terms
- Amortize Equipment Cost Evenly Over Useful Life
- Cash Flow
- Flexibility on Other Financing
- Off-the-Balance-Sheet Financing
- Leverage

Possible Disadvantages to Customers

- Higher Cost
- Tax Benefits May Be Less
- Inflexible Terms Over Life of Lease
- Cash Flow Needs May Increase
- Lease Payments Due and Payable, Regardless
- Primary Lender May Not Be Consulted
- Prestige of Ownership

Types of Leases

A. Classification for Financial Reports (FASB 13)

1) Of the LESSEE

a. Operating or Service Lease

Cancelable, short to intermediate term lease direct expense item. Purchase use of item and related services.

b. Capital Lease

Non-cancelable leases that (should) offset Balance Sheets similar to purchase/loan agreements.

2) Of the LESSOR

a. Operating Lease

Lessor is owner of property and treats as any other business property. Provides financial and other services.

b. Financial Lease

Noncancelable contracts that basically are means of providing financing. Responsibility for maintenance, insurance, etc. is passed to user.

B. Classification for Federal Income Tax Reports

1. "True" lease

Lessee deducts lease payments as business expense
Lessor deducts depreciation and ITC (plus business expense)

2. Conditional Sales Contract

Lessee deducts tax benefits of ownership (Depr. & ITC)
Lessor is lending money, and deducts cost of a lender

C. Regardless what lessee and lessor call it, tax benefits are assigned by IRS standards.

IRS Lease Criteria

Tax Savings is key to leasing, so must convince IRS not just an installment loan disguised as a lease.

"True Lease" - major considerations

1. No option for lessee to renew lease or purchase asset at bargain price.
2. Lease length should be less than 75 percent of assets economic life.
3. Lease payments must provide a reasonable profit on fair value of the property.

If fails any of these tests, it is a conditional sale, not a lease. IRS did not want leasing to merely be a way to transfer tax benefits between firms.

Basic tests are vague and companies continually testing "grey areas".

But "ERTA 81" Broadens the IRS Definition of a Lease.

"Safe Harbor" Leases

- ERTA '81 expressly sanctions transactions with no business purpose other than the transfer of tax benefits.

- "Safe Harbor" provisions guarantee treatment as a lease for tax purposes.

  1. Lessor and Lessee agree transaction is a lease and to treat Lessor as owner for tax purposes.

  2. Lessor must be a corporation, (not S)

  3. Lessor has 10% minimum investment

  4. Lease term at most A) 90% of useful life or (B) 150% of ADR class life

  5. Applies only to new, Sec. 38 (ITC) property.

- If these requirements are met:

  1) Lessor can receive ITC and cost recovery deductions, and offer lower lease payments

  2) A leasing firm no longer must earn a reasonable return apart from the tax benefits

"Safe Harbor" Leases (cont.)

- Applies only to new, Sec. 38 (ITC) property
- Intent was to facilitate new investment by unprofitable firms by allowing tax benefits to pass to profitable firms
- The mechanism allows future tax benefits to be sold for cash immediately. Then future lease payments and debt payments "wash". Lessor gets tax savings in early years, lessee defers tax shield and gets cash "up front".

- This tax maneuver primarily applies to large businesses.
- But "safe harbor" provides all leasing firms more latitude in structuring leases
  - return can be solely on tax benefits
  - lease term can match useful life more closely
  - end of lease price as low as $1. OK

Off-The-Balance-Sheet Financing

- Leased assets and liabilities only footnoted.
- May give appearance of higher acctg. profits.
- Example firm before and after a $200 asset acquisition by loan or by lease.

Item	Before Acquisition	After Acquisition	
		Buy/Loan	Lease
Total Assets	$500	$700	$500
Debt	100	300	100
Equity	400	400	400
	$500	$700	$500
D/A Ratio	.20	.43	.20
Leverage (D/E)	.25	.75	.25

- Return on assets will appear larger
- But cash flow burdens of debt and lease service are equally dangerous
- Large firms are now required to capitalize leases (FASB-13)
- What about farm firms (and their lenders)?

Lease or Borrow? Key Variables

- Obligation for future payments applies to loans and leases
- Cost comparison of lease and debt financing helps evaluate leasing
- Since costs differ in magnitude and timing, cash flows must be discounted to the present for comparison
- Cash flows must be after-tax costs

Following are ways they may differ.

Method of Acquiring Use of Asset	User of Asset	Owner of Asset
Leasing	Lessee Gets lease payment deduction Avoids cash purchase outlay	Lessor entitled to depreciation deduction ITC Residual value
Borrowing	Borrower gets Depreciation Deduction Interest Deduction ITC Residual Value	Lender Entitled to no deductions (except normal)

Present Value and Discounted Cash Flow

Time Value of Money

- The farther in the future one receives money, the less value that money will have.

- Similarly, a future payment costs less in terms of present value (today) because the payer can invest the money during the period of deferral.

- If I can earn 10% per year, I'm indifferent whether I pay $1.00 today or $1.10 one year later. Thus, the present value of $1 a year from now, discounted at 10%, is 1.00 ÷ 1.10 = .909.

- Similar discount factors can be calculated for any time period and discount rate, to allow future cash flows to be discounted to the present.

- Comparison of 2 cash flows in present value terms provides one measure of comparison.

Lease vs. Buy

Joe Farmer needs a new combine. He has assembled the following information:

Equipment Cost	$100,000
Lease Terms	7 years, payment prepaid
Lease Payments	$16,000/yr, ITC to lessor
	$19,800/yr, ITC to lessee
Recovery Deduction	ACRS, 5 years
Purchase Option	20% of original cost at end of lease
ITC	10% or $10,000
Tax Rate	28%
Estimated Life	12 years
Borrowing	5 year level payment loan with 20% down. At 15% interest, annual payments are $23,865 per year

Joe figures his discount rate to be 10 percent, since that's what he's been earning in his business.

WORKSHEET - COST OF OWNING MACHINERY

Terms
Cash Paid $ 100,000
Rem. Basis of Trade In $ -
Adj. Basis $ 100,000
(Also equals amount eligible for ITC on new equipment)

Interest Rate 15 %
Down Payment $ 20,000
Years of Loan 5
Marginal Tax Rate 28 %
Discount Rate 10 %
ITC Rate 10 %

Depreciation:
Method? ACRS ✓ S.L. ____
Years 5
Residual Value in Year 7 $ 20,000
If Sale and Purchase:
ITC Recaptured -
Depr. Recaptured -

	C A S H F L O W									
		TAX SHIELD DATA							PRESENT	
YEAR	TOTAL PAYMENTS (1)=(2)+(3)	PRIN (2)	INT (3)	DEPR (4)	TOTAL (5)=3+4	TAX SAVINGS (6)	ITC (7)	REMAINING VALUE (8)	TOTAL (9)=1-6-7+8	VALUE FACTORS 1]	P.V. COST OF OWNING
0	# -20,000								-20,000	1.0	-20,000
1	-23,865	11,865	12000	15000	27,000	7,560	10,000		- 6,305	.909	- 5,732
2	-23,865	13645	10220	21000	32,220	9,022			-14,843	.826	-12,267
3	-23,865	15692	8173	21000	29,173	8,168			-15,697	.751	-11,793
4	-23,865	18045	5820	21000	24,820	7,510			-16,355	.683	-11,171
5	-23,865	20752	3113	21000	24,113	6,752			-17,113	.621	-10,626
6										.564	
7								20,000	20,000	.513	+10,263
8											
9											
10											
Cost to own	# -139,325					39,012	10,000	20,000	$-70,313		$-61,326

1] USED 6 DIGITS FOR ACTUAL COMPUTATIONS.

COST OF LEASING MACHINERY & COMPARISON WITH OWNING

Terms

Selling Price of Machine $ 100,000
Investment Tax Credit (ITC) Rate 10%
ITC To Lessor or Lessee? LESSOR

Type of Lease TRUE
Residual Value in Year ____ $ -
Sale Price of Old Mach. 1/ $ -

Lease Payment $ 16,200 / YR
Pre Paid? Yes ✓ or No ____
Marginal Tax Rate 28%
Discount Rate 10%

CASH FLOWS

YEAR	LEASE PAYMENT (1)	OTHER 2/ (2)	TOTAL LEASE COSTS (3)=1+2	TAX SAVINGS (4)	ITC (5)	REMAINING VALUE (6)	TOTAL (7)=3+4+5+6	PRESENT VALUE FACTORS (7)	PRESENT VALUE COST OF LEASING (8)=6x7
0			-16,200				-16,200	1.0	-16,200
1			-16,200	4536			-11,664	.909	-10,604
2			-16,200	4536			-11,664	.826	- 9,640
3			-16,200	4536			-11,664	.751	- 8,763
4			-16,200	4536			-11,664	.683	- 7,967
5			-16,200	4536			-11,664	.621	- 7,242
6			-16,200	4536			-11,664	.564	- 6,584
7				4536			4,536	.513	+ 2,328
8									
9									
10									
Cost to: Lease			-113,400	31,752	-	-	$ -81,648		$ -64,672 ✓
Own			-139,325	39,012	10,000	20,000	$ -70,313		$ -61,326 ✓

1/ Trade in for a leased machine, is actually a sale of the old machine for tax purposes. Therefore, you must establish a sale price to determine taxable gain. You may also be subject to recapture of ITC.

2/ In Ohio, leased farm machinery is subject to personal property tax and most lease contracts require the lessee to pay any tax.

Comparison of Present Values of After Tax Costs of Three Financing Alternatives For Selected Tax and Discount Rates

Discount Rates	0% MTR			28% MTR			50% MTR		
	Buy-Loan	Lease & ITC		Buy-Loan	Lease & ITC		Buy-Loan	Lease & ITC	
		Lessee	Lessor		Lessee	Lessor		Lessee	Lessor
0	119,325	138,600	113,400	70,313	89,792	81,648	49,920	69,300	56,700
5	109,109	120,299	98,426	65,678	78,695	72,179	48,763	63,000	51,557
10	100,204	106,034	86,755	61,326	69,953	64,672	47,173	57,836	47,321
15	92,480	94,733	77,509	57,368	62,972	58,637	45,436	53,545	43,809
20	85,789	85,645	70,073	53,829	57,328	53,723	43,702	49,960	40,876

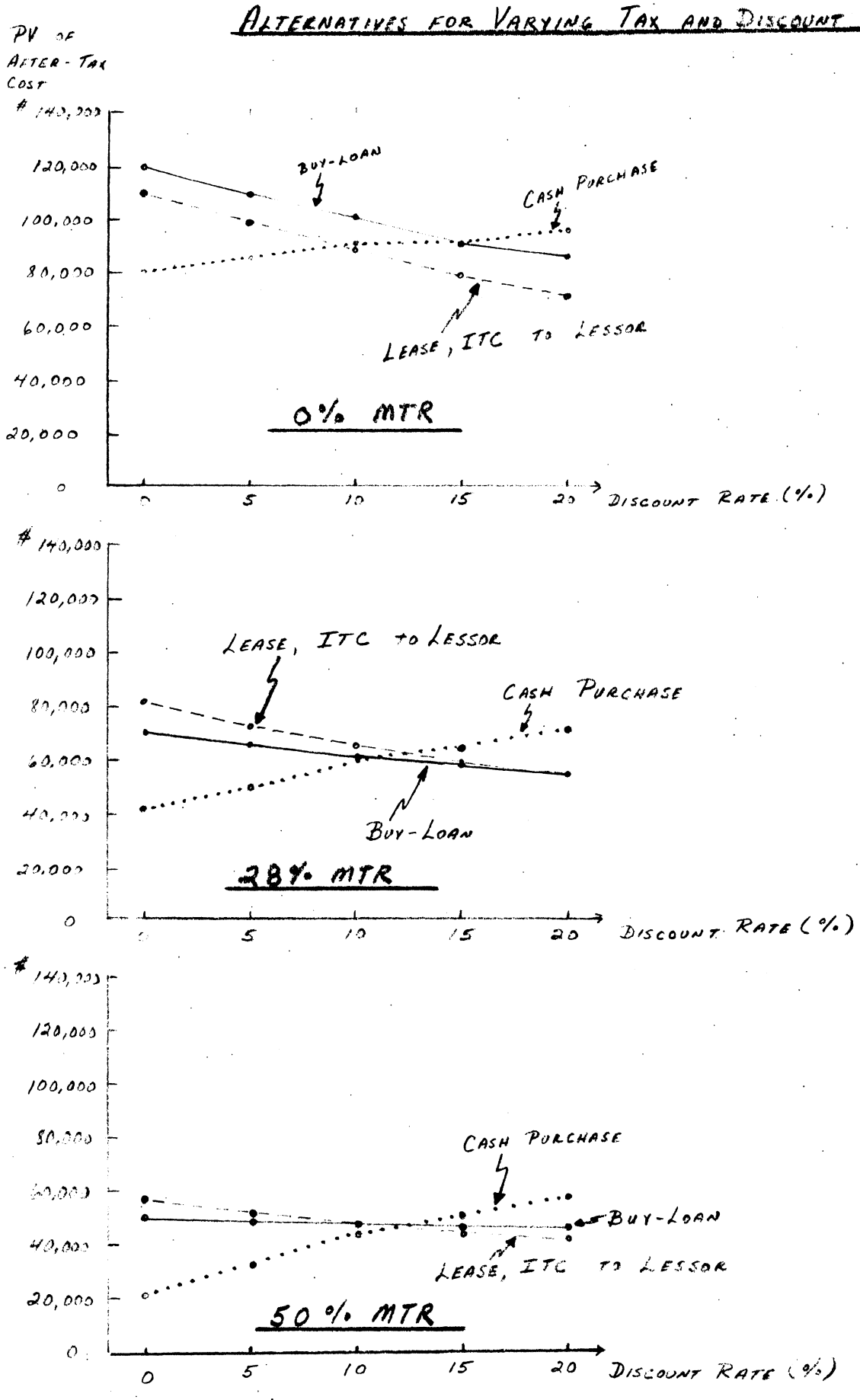
Questions:

How would a cash purchase option compare?

What would happen to the buy-borrow alternative if the residual value was more than $20,000?

What other things ought to be considered in choosing between buy-borrow and lease?

Comparison of PV's of After Tax Costs of 3 Financing Alternatives for Varying Tax and Discount Rates



LESSEES WHO MIGHT BENEFIT FROM LEASE FINANCING

- THOSE WITH LIMITED CAPITAL AND INABILITY TO USE DEBT-FINANCING
- THOSE WITH LOW OR NO INCOME TAX LIABILITY WHO CANNOT USE THE ITC
- THOSE WITH A RAPID GROWTH STRATEGY WHO SEE LEASING AS INCREASING LEVERAGE
- THOSE WHO PREFER FIXED RATE FINANCING
- BUT FIRST MUST NEED THE MACHINE OR OTHER INVESTMENT UNDER CONSIDERATION

CAUTIONS ABOUT LEASING

- LEASING WILL NOT MAKE AN UNPROFITABLE INVESTMENT PROFITABLE

- LESSEE WITH CASH FLOW PROBLEMS IS MORE VULNERABLE WITH LEASE THAN LOAN

- SALE/LEASEBACK TRANSACTIONS REDUCE EQUITY IN BUSINESS AND MAY TRIGGER ADDED TAXES

- FIXED RATE FINANCING MAY ACTUALLY BE HIGH COST FINANCING

- HOW MUCH OF TOTAL DEBT OF A BUSINESS CAN BE VIA FINANCIAL LEASE AND STILL BE FINANCIALLY SAFE?

Loan vs. Lease - The Lessor's View

Lessor can loan or lease to Joe Farmer. If he makes a loan his cash flow and earnings are like this. Assume 50% tax rate and 15% interest rate on the loan.

Year	Cash In Loan Payments	Cash Out Loan	Cash Out Taxes	Cash Flow
0	--	-$80,000	--	-$80,000
1	$23,865	--	-6,000	17,865
2	23,865	--	-5,110	18,755
3	23,865	--	-4,087	19,778
4	23,865	--	-2,910	20,955
5	23,865	--	-1,556	22,309
TOTAL	$119,325	-$80,000	$-19,663	$19,662

Loan After - Tax Yield	7.5 %

Tax is owed on the interest portion of the loan payments

Loan vs. Lease - The Lessor's View (cont)

Lessor's cash flow and yield on a lease looks like this:

Year	Equip Cost	Lease Pmnts. & Resid.	Tax on Lease Income	Tax Savings on Depreciation	Cash Flow	Cash Flow with ITC
0	-100,000	16,200		--	-83,800	-83,800
1		16,200	-8,100	7,500	15,600	25,600
2		16,200	-8,100	11,000	19,100	19,100
3		16,200	-8,100	10,500	18,600	18,600
4		16,200	-8,100	10,500	18,600	18,600
5		16,200	-8,100	10,500	18,600	18,600
6		16,200	-8,100	--	8,100	8,100
7		20,000	-8,100	--	11,900	11,900
Total	-100,000	$133,400	$-56,700	$50,000	$26,700	$36,700
Lease After - Tax Yield					8.1 %	11.7 %

The lease payments and depreciation shield by themselves earn an 8.1 % return, only slightly higher than a loan. But when the ITC benefits are added in, the after - tax yield is 11.7 %, compared to only 7.5 % for a loan.

Loan vs. Lease - The Lessors View (cont.)

- Actual yield from leasing will vary from this example. But potential return is higher via lease than loan.

- Risks of Leasing, also affect lessor return
  - Rate risk, some leases are now variable rate
  - Credit risk
    - failure to pay
    - recapture of ITC possible
    - But have equipment as security
  - Residual Risk
  - Tax risk - can tax benefits be used?

Leasing vs. Purchasing Agricultural Equipment

Summary

- Machinery leasing offers profits to lessors.
- Leases can be structured and presented in many ways - especially with "safe harbor" rules
- Leasing is commonly used as a way to increase sales
- Users may or may not benefit from leasing. Each lease needs to be evaluated by the potential lessee.
- Many farm operators are unable to properly evaluate a lease contract because they lack the necessary analytical skills.
- Lessees need to examine factors other than present value comparison - related tax effects, effect on total cash flow, impact of default, etc.
- Leasing is not a substitute for profits, or wise use of credit.
- Lessors need to remember the size and form of business organization in agriculture differs from other businesses.

I. Lease vs. Buy, "Safe Harbor" Lease

Equipment Cost	$50,000
Lease Terms	5 Years, Prepaid, ITC to Lessor
Lease Payments	$11,971/year
Purchase Option	ACRS, 5 Years
ITC	10 % or $50,000
Tax Rate	25 %
Estimated Life	10 Years
Borrowing	5 Year Level Payment Loan With 20 % Down, 16 % Interest Rate. Annual Payment of $12,216
Discount Rate	10 %
Analysis Period	5 Years

I. - "SAFE HARBOR" LEASE

WORKSHEET - COST OF OWNING MACHINERY

Terms
Cash Paid $ 60,000
Rem. Basis of Trade In $ -
Adj. Basis $ 50,000
(Also equals amount eligible for ITC on new equipment)

Interest Rate 16 %
Down Payment $ 10,000
Years of Loan 5
Marginal Tax Rate 25 %
Discount Rate 10 %
ITC Rate 10 %

Depreciation:
Method? ACRS ✓ S.L. ____
Years 5
Residual Value in Year 5 $ 1-
If Sale and Purchase:
ITC Recaptured -
Depr. Recaptured -

5 YEAR ANALYSIS

YEAR	TOTAL PAYMENTS (1)=(2)+(3)	CASH FLOW: TAX SHIELD DATA PRIN (2)	INT (3)	DEPR (4)	TOTAL (5)=3+4	TAX SAVINGS (6)	ITC (7)	REMAINING VALUE (8)	TOTAL (9)=1-6-7+8	PRESENT VALUE FACTORS	P.V. COST OF OWNING
0	-10,000								-10,000		
1	-12,216	5811	6400	7500	19,900	3475	5,000		-3,741		
2	-12,216	6747	5469	11000	16,469	4117			-8,099		
3	-12,216	7827	4390	10500	14890	3722			-8,494		
4	-12,216	9079	3138	10500	13638	3409			-8,807		
5	-12,216	10531	1685	10500	12185	3046		1	-9,169		
6											
7											
8											
9											
10											
Cost to own	$ -71,080					17769	5,000	1	$ -48,310		$ -38,185

I - "SAFE HARBOR" LEASE

COST OF LEASING MACHINERY & COMPARISON WITH OWNING

Terms

Selling Price of Machine $ 50,000
Investment Tax Credit (ITC) Rate 10 %
ITC To Lessor or Lessee? Lessor
Security Deposit $ —

Type of Lease "SAFE HARBOR"
Residual Value in Year 5 $ 1¢
Sale Price of Old Mach.1/ $ —
Interest Rate on Sec. Dep. — %

Lease Payment $ 11,971 / YR (5)
Pre Paid? Yes ✓ or No
Marginal Tax Rate 25 %
Discount Rate 10 %

CASH FLOWS

YEAR	LEASE PAYMENT (1)	OTHER 2/ (2)	TOTAL LEASE COSTS (3)=1+2	TAX SAVINGS (4)	ITC (5)	REMAINING VALUE (6)	TOTAL (7)=3+4+5+6	PRESENT VALUE FACTORS (7)	PRESENT VALUE COST OF LEASING (8)=6x7
0			-11,971				-11,971	1.0	
1			-11,971	2993			-8,978		
2			-11,971	2993			-8,978		
3			-11,971	2993			-8,978		
4			-11,971	2993			-8,978		
5				2993			2,993		
6									
7									
8									
9									
10									
Cost to: Lease	$		$ -59,855	14,965	-	-	$ -44,890		$ -38,573 ✓
Own	$		-71,080	17,769	5,000	1	$ -48,310		$ -38,185 ✓

1/ Trade in for a leased machine, is actually a sale of the old machine for tax purposes. Therefore, you must establish a sale price to determine taxable gain. You may also be subject to recapture of ITC.

2/ In Ohio, leased farm machinery is subject to personal property tax and most lease contracts require the lessee to pay any tax.

II. Lease vs. Buy, Variable Payment Lease

Equipment Cost	$47,500
Lease Terms	5 Years, Prepaid, ITC to Lessee
Lease Payments	$9,659 per Year in Years 1 & 2 $11,095 per Year in Years 3, 4, & 5
Recovery Deduction	ACRS, 5 Years
Purchase Option	25 % or $11,875
ITC	10 % or $4,750
Tax Rate	28 %
Estimated Life	10 Years
Borrowing	5 Year Level Payment Loan With 20 % Down, 15 % Interest Rate. Annual Payment of $11,336
Discount Rate	10 %
Analysis Period	A) 5 Years, Assume Owner Has the $11,875 Residual Value B) 10 Years, Assume Buy at End of Lease and S.L. Depreciation Over 5 Years.

II - Variable Payment Lease, 5 Year Analysis

WORKSHEET - COST OF OWNING MACHINERY

Terms
Cash Paid $ 47,500
Rem. Basis of Trade In $ -
Adj. Basis $ 47,500
(Also equals amount eligible for ITC on new equipment)

Interest Rate 15 %
Down Payment $ 9,500 (20%)
Years of Loan 5
Marginal Tax Rate 28 %
Discount Rate 10 %
ITC Rate 10 %

Depreciation:
Method? ACRS ✓ S.L. ____
Years 5
Residual Value in Year 5 $ 11,875 (25%)
If Sale and Purchase:
ITC Recaptured -
Depr. Recaptured -

YEAR	CASH FLOW: TOTAL PAYMENTS (1)=(2)+(3)	TAX SHIELD DATA: PRIN (2)	INT (3)	DEPR (4)	TOTAL (5)=3+4	TAX SAVINGS (6)	ITC (7)	REMAINING VALUE (8)	TOTAL (9)=1-6-7+8	PRESENT VALUE FACTORS	P.V. COST OF OWNING
0	-9500								-9,500		
1	-11336	5636	5700	7125	12825	3591	4750		-2,995		
2	-11336	6481	4855	10460	15305	4285			-7,051		
3	-11,336	7454	3882	9778	13857	3880			-7,456		
4	-11,336	8572	2764	9778	12739	3567			-7,769		
5	-11,336	9857	1479	9776	11454	3207		11,875	3,746		
6											
7											
8											
9											
10											
Cost to own	$-66,180					18,530	4,750	11,875	$-31,025		$-24,432

II - Vol. Payment Lease, 5 year analysis.

COST OF LEASING MACHINERY & COMPARISON WITH OWNING

9,659/yr in yrs 1+2

Terms

Selling Price of Machine $ 47,500
Investment Tax Credit (ITC) Rate 10 %
ITC To Lessor or Lessee? Lessee
Security Deposit $ —

Type of Lease True
Residual Value in Year 5 $ 11,875
Sale Price of Old Mach.1/ $ —
Interest Rate on Sec. Dep. — %

Lease Payment $ 11,095 / yr in 3,4,+5
Pre Paid? Yes — or No ____
Marginal Tax Rate 28 %
Discount Rate 10 %

CASH FLOWS

YEAR	LEASE PAYMENT (1)	OTHER 2/ (2)	TOTAL LEASE COSTS (3)=1+2	TAX SAVINGS (4)	ITC (5)	REMAINING VALUE (6)	TOTAL (7)=3+4+5+6	PRESENT VALUE FACTORS (7)	PRESENT VALUE COST OF LEASING (8)=6x7
0			-9659				-9,659	1.0	
1			-9659	2705	4,750		-2,204		
2			-11,095	2705			-8,390		
3			-11,095	3103			-7,988		
4			-11,095	3107			-7,988		
5				3107			3,107		
6									
7									
3									
9									
10									
Cost to: Lease $			-52,603	14,731	4,750	—	$ 33,122		$ -28,126 ✓
Own $			-66,180	18,530	4,750	11,875	$ 31,025		$ -26,632 ✓

1/ Trade in for a leased machine, is actually a sale of the old machine for tax purposes. Therefore, you must establish a sale price to determine taxable gain. You may also be subject to recapture of ITC.

2/ In Ohio, leased farm machinery is subject to personal property tax and most lease contracts require the lessee to pay any tax.

II-A, VBL. PAYMENT LEASE/PURCHASE, 10 YEAR ANALYSIS

WORKSHEET - COST OF OWNING MACHINERY

Terms
Cash Paid $ 47,500
Rem. Basis of Trade In $ -
Adj. Basis $ 47,500
(Also equals amount eligible for ITC on new equipment)

Interest Rate 15 %
Down Payment $ 9,500
Years of Loan 5
Marginal Tax Rate 28 %
Discount Rate 10 %
ITC Rate 10 %

Depreciation:
Method? ACRS ✓ S.L. ____
Years 5
Residual Value in Year 10 $ -0-
If Sale and Purchase:
ITC Recaptured -
Depr. Recaptured -

YEAR	TOTAL PAYMENTS (1)=(2)+(3)	CASH FLOW: TAX SHIELD DATA PRIN (2)	INT (3)	DEPR (4)	TOTAL (5)=3+4	TAX SAVINGS (6)	ITC (7)	REMAINING VALUE (8)	TOTAL (9)=1-6-7+8	PRESENT VALUE FACTORS	P.V. COST OF OWNING
0	-9,500								-9,500		
1	-11,336					3591	4,750		-2,995		
2	-11,336					4285			-7,051		
3	-11,336					3880			-7,456		
4	-11,336					3567			-7,769		
5	-11,336					3207			-8,129		
6											
7											
8											
9											
10											
Cost to own	$ -66,180					18,530	4,750	-	$ -42,900		$ -34,005

II-A, VBL. PAYMENT LEASE/PURCHASE, 10 YEAR ANALYSIS.

COST OF LEASING MACHINERY & COMPARISON WITH OWNING

$9659/yr in yrs 1 & 2

Terms

Selling Price of Machine $ 47,500
Investment Tax Credit (ITC) Rate 10 %
ITC To Lessor or Lessee? LESSEE
Security Deposit $ -

Type of Lease TRUE (25%)
Residual Value in Year 5 $ 11,875
Sale Price of Old Mach.1/ $ -
Interest Rate on Sec. Dep. - %

Lease Payment $ 11,095 / yr in 3, 4, & 5
Pre Paid? Yes ✓ or No
Marginal Tax Rate 28 %
Discount Rate 10 %

YEAR	LEASE PAYMENT (1)	OTHER 2/ (2)	CASH FLOWS: TOTAL LEASE COSTS (3)=1+2	TAX SAVINGS (4)	ITC (5)	REMAINING VALUE (6)	TOTAL (7)=3+4+5+6	PRESENT VALUE FACTORS (7)	PRESENT VALUE COST OF LEASING (8)=6x7
0			-9659				-9,659	1.0	
1			-9659	2705	4,750		-2,204		
2			-11,095	2705			-8,390		
3			-11,095	3107			-7,988		
4			-11,095	3107			-7,988		
5			-11,876	3107			-8,768		
6				665			665		
7				665			665		
8				665			665		
9				665			665		
10				665			665		
Cost to: Lease $			-64,478	18,056	4,750	-	$ -41,672		$ -33,935 ✓
Own $			-66,180	18,580	4,750	-	$ -42,900		$ -34,005 ✓

1/ Trade in for a leased machine, is actually a sale of the old machine for tax purposes. Therefore, you must establish a sale price to determine taxable gain. You may also be subject to recapture of ITC.

2/ In Ohio, leased farm machinery is subject to personal property tax and most lease contracts require the lessee to pay any tax.

III. Lease vs. Buy, Trade and Lease/Purchase

Equipment Cost	$100,000 list price ($50,000 BOOT)
Lease Terms	4 Years, Not Prepaid, ITC to Lessor
Lease Payments	$12,370 Per Year
Recovery Deductions	ACRS, 5 Years
Purchase Option	25 % or $25,000 at End of Lease
ITC	10 % or $10,000
Tax Rate	20 %
Estimated Life	10 Years
Borrowing	5 Year Level Payment Loan, Nothing Down, 17.9 % Interest Rate. Annual Payment of $15,953
Discount Rate	10 %
Analysis Period	10 Years

III - TRADE + RESIDUAL LEASE/PURCHASE, 10 YEAR ANALYSIS.

WORKSHEET - COST OF OWNING MACHINERY

Terms
Cash Paid $ 50,000
Rem. Basis of Trade In $ 20,000
Adj. Basis $ 70,000
(Also equals amount eligible for ITC on new equipment)

Interest Rate 17.9 %
Down Payment $ -
Years of Loan 5 (on 50,000)
Marginal Tax Rate 20 %
Discount Rate 10 %
ITC Rate 10 %

Depreciation:
Method? ACRS ✓ S.L. ____
Years 5
Residual Value in Year 10 $ -0-
If Sale and Purchase:
ITC Recaptured $2,000
Depr. Recaptured ? (Cost as $30,000)

YEAR	CASH FLOW: TOTAL PAYMENTS (1)=(2)+(3)	TAX SHIELD DATA: PRIN (2)	INT (3)	DEPR (4)	TOTAL (5)=3+4	TAX SAVINGS (6)	ITC (7)	REMAINING VALUE (8)	TOTAL (9)=1-6-7+8	PRESENT VALUE FACTORS	P.V. COST OF OWNING
0	-								-		
1	-15,953	7003	8956	10500	19450	3,890	7,000 (2,000 RECAPTURED)		-7,063		
2	-15,953	8256	7656	15400	23056	4,619			-11,333		
3	-15,953	9734	6219	14700	20,919	4,184			-11,769		
4	-15,953	11476	4476	14700	19176	3,835			-12,117		
5	-15,953	13531	2422	14700	17122	3,424			-12,529		
6											
7											
8											
9											
10											

Cost to own $ -79,765 | 19,952 | 5,000 | - | $ -54,810 | $ -40,865

III - TRADE AND LEASE/PURCHASE; COST OF LEASING MACHINERY & COMPARISON WITH OWNING

10 YEAR ANALYSIS

Terms

Selling Price of Machine $ 100,000
Investment Tax Credit (ITC) Rate 10 %
ITC To Lessor or Lessee? LESSOR
Security Deposit $ -

Type of Lease TRUE (28%)
Residual Value in Year 5 $ 25,000
Sale Price of Old Mach. 1/ $? (50,000 ?)
Interest Rate on Sec. Dep. - %

Lease Payment $ 12,370 / YR (4 YRS.)
Pre Paid? Yes ____ or No ✓
Marginal Tax Rate 20 %
Discount Rate 10 %

CASH FLOWS

YEAR	LEASE PAYMENT (1)	OTHER 2/ (2)	TOTAL LEASE COSTS (3)=1+2	TAX SAVINGS (4)	ITC (5)	REMAINING VALUE (6)	TOTAL (7)=3+4+5+6	PRESENT VALUE FACTORS (7)	PRESENT VALUE COST OF LEASING (8)=6x7
0			- TRADE-IN.				-	1.0	
1			-12,370	2474	-2,000	RECAP	-11,896		
2			-12,370	2474			-9,896		
3			-12,370	2474			-9,896		
4			-12,370	2474			-9,896		
5			-25,000	-			-25,000		
6				1000			1,000		
7				1000			1,000		
8				1000			1,000		
9				1000			1,000		
10				1000			1,000		
Cost to: Lease	$		-74,480	14,896	-2,000	-	$ -61,584		$ -46,356 ✓
Own	$		-79,765	19,952	5,000	-	$ -54,810		$ -40,685 ✓

1/ Trade in for a leased machine, is actually a sale of the old machine for tax purposes. Therefore, you must establish a sale price to determine taxable gain. You may also be subject to recapture of ITC.

2/ In Ohio, leased farm machinery is subject to personal property tax and most lease contracts require the lessee to pay any tax.

IV. Lease vs. Buy and 3rd Party "Safe Harbor" Lease

Equipment Cost	$100,000
Lease Terms	
A) True Lease	5 Years, Security Deposit of $7,500 Paying 10 %, not Prepaid, ITC to Lessor.
B) "Safe Harbor"	3rd Party Pays $20,000 for Tax Benefits, 5 Year Lease and Offsetting Purchase Payments of $24,433/Yr.
Recovery Deduction	ACRS, 5 Years
Purchase Option	10 % or $10,000 (True Lease)
ITC	10 % or $10,000
Tax Rate	20 %
Estimated Life	15 Years
Borrowing	15 Year Level Payment Loan, 30 % Down 16 % Interest Rate. Annual Payment of $12,555.
Discount Rate	10 %
Analysis Period	15 Years

On 3rd party Safe Harbor Lease, Lessee still owns the property and finances it through a lender, but sells the ITC and recovery tax benefits for $20,000. This reduces cash needed for down payment to $10,000. Tax savings reflect lease payment, interest paid on loan, and interest earned from sale of tax benefits. Cash flow reflects $10,000 down, $12,555/year loan payment, less tax shield at 20 % rate.

IV - OWN, LEASE, 3RD PARTY SAFE HARBOR LEASE,
15 YEAR ANALYSIS.

WORKSHEET - COST OF OWNING MACHINERY

Terms
Cash Paid $ 100,000
Rem. Basis of Trade In $ -
Adj. Basis $ 100,000
(Also equals amount eligible for ITC on new equipment)

Interest Rate 16 %
Down Payment $ 30,000
Years of Loan 15
Marginal Tax Rate 20 %
Discount Rate 10 %
ITC Rate 10 %

Depreciation:
Method? ACRS ✓ S.L. ____
Years 5
Residual Value in Year - $ -
If Sale and Purchase:
ITC Recaptured -
Depr. Recaptured -

YEAR	CASH FLOW: TOTAL PAYMENTS (1)=(2)+(3)	TAX SHIELD DATA: PRIN (2)	INT (3)	DEPR (4)	TOTAL (5)=3+4	TAX SAVINGS (6)	ITC (7)	REMAINING VALUE (8)	TOTAL (9)=1-6-7+8	PRESENT VALUE FACTORS	P.V. COST OF OWNING
0	-30,000								-30,000		
1	-12,556		11,200	15000	26,200	5240	10,000		2,685		
2	-12,556		10788	22000	32788	6597			-5,968		
3	-12,556		10232	21000	31232	6346			-6,209		
4	-12,556		10478	21000	31478	6288			-6,267		
5	-12,556		10102	21000	31102	6220			-6,335		
6	-12,556		9709		9709	1942			-10,614		
7	-12,556		9254		9254	1851			-10,705		
8	-12,556		8725		8725	1745			-10,810		
9	-12,556		8113		8113	1623			-10,932		
10	-12,556		7408		7408	1481			-11,074		
11	-12,556		6577		6577	1315			-11,240		
12	-12,556		5621		5621	1124			-11,431		
13	-12,556		4511		4511	902			-11,653		
14	-12,556		3226		3226	645			-11,910		
15	-12,556		1732		1732	346			-12,209		
16											

Cost to own	$ -218,325	43,665	10,000	-	$ -164,660

$ -87,811

III - Own, Lease, 3rd Party Sale Nebraska Lease, 15 Year Analysis

COST OF LEASING MACHINERY & COMPARISON WITH OWNING

Terms

Selling Price of Machine $ 100,000
Investment Tax Credit (ITC) Rate 10 %
ITC To Lessor or Lessee? Lessor
Security Deposit $ 7500 -

Type of Lease True (10%)
Residual Value in Year 5 $10,000
Sale Price of Old Mach.1/ $
Interest Rate on Sec. Dep. 10 %

Lease Payment $29,796 / yr (5 yrs)
Pre Paid? Yes ___ or No ✓
Marginal Tax Rate 20 %
Discount Rate 10 %

CASH FLOWS

YEAR	LEASE PAYMENT (1)	OTHER 2/ (2)	TOTAL LEASE COSTS (3)=1+2	TAX SAVINGS (4)	ITC (5)	REMAINING VALUE (6)	TOTAL (7)=3+4+5+6	PRESENT VALUE FACTORS (7)	PRESENT VALUE COST OF LEASING (8)=6x7
0	-7500	Int. on Sec. Deposit	-7500				-7,500	1.0	
1	-29,796	750	-29,046	5809	-		-23,237		
2	-29796	750	-29,046	5809			-23,237		
3	-29,796	750	-29,046	5809			-23,237		
4	-29,796	750	-29,046	5809			-23,237		
5	-2,500 -29,796	750	-31,546	5809			-25,737		
6-10				400		Yes 6-10	400		
11-16				0			0		
8									
9									
10									
Cost to:									
Lease $			-155,230	31,045	-	-	$-124,185		$-96,197 ✓
Own $			-218,325	43,665	10,000	-	$-164,660		$-87,811 ✓

1/ Trade in for a leased machine, is actually a sale of the old machine for tax purposes. Therefore, you must establish a sale price to determine taxable gain. You may also be subject to recapture of ITC.

2/ In Ohio, leased farm machinery is subject to personal property tax and most lease contracts require the lessee to pay any tax.

IV - OWN, LEASE, 3RD PARTY "SAFE HARBOR" LEASE,
15 YEAR ANALYSIS

COST OF LEASING MACHINERY & COMPARISON WITH OWNING

Terms

Selling Price of Machine $ 100,000
Investment Tax Credit (ITC) Rate 10 %
ITC To Lessor or Lessee? LESSOR
Security Deposit $ —

Type of Lease 3RD PARTY "SAFE HARBOR"
Residual Value in Year 5 $ 1-
Sale Price of Old Mach.1/ $ —
Interest Rate on Sec. Dep. — %

Lease Payment $ 24,433 / YR
Pre Paid? Yes ____ or No —
Marginal Tax Rate 20 %
Discount Rate 10 %

TAXABLE CASH AND NON-CASH FLOWS

CASH FLOWS

YEAR	LEASE PAYMENT (1)	INT. ON LOAN	INT. INCOME OTHER 2/ (2)	TOTAL ~~LEASE LOAN~~ COSTS (3)=1+2	TAX SAVINGS (4)	ITC (5)	REMAINING VALUE (6)	TOTAL (7)=3+4+5+6	PRESENT VALUE FACTORS (7)	PRESENT VALUE COST OF LEASING (8)=6x7
0	—			-10,000	(30,000 LESS 20,000 FOR TAX BENEFITS.)			-10,000	1.0	
1	-24433	-11200	12800	-12,555	4567			- 7,988		
2	-24433	-10913	10913	-12,555	4895			- 7,660		
3	-24433	-10732	11710	-12,555	5277			- 7,278		
4	-24433	-10440	6275	-12,555	5720			-6,835		
5	-24433	-9802	3370	-12,555	6233			-6,322		
6		-9709		-12,555	1948			-10,613		
7		-9384		-12,555	1851			-10,704		
8		-8736			1745			-10,810		
9		-8113			1623			-10,932		
10		-7402			1480			-11,075		
11		-6677			1315			-11,240		
12		-5631			1124			-11,451		
13		-4511			902			-11,653		
14		-3225			645			-11,910		
15		-1732		-12,555	346			-12,209		
3rd Party Lease				-198,325	23,665	-	-	-174,660		$ -80,102 ✓
Cost to: Lease $				-155,230	31,045	-	-	$-124,185		$-88,388 ✓
Own $				-218,325	43,665	10,000	-	$-164,660		$-76,288 ✓

1/ Trade in for a leased machine, is actually a sale of the old machine for tax purposes. Therefore, you must establish a sale price to determine taxable gain. You may also be subject to recapture of ITC.

2/ In Ohio, leased farm machinery is subject to personal property tax and most lease contracts require the lessee to pay any tax.

WORKSHEET - COST OF OWNING MACHINERY

Terms
Cash Paid $ _____
Rem. Basis of Trade In $ _____
Adj. Basis $ _____
(Also equals amount eligible for ITC on new equipment)

Interest Rate _____%
Down Payment $ _____
Years of Loan _____
Marginal Tax Rate _____%
Discount Rate _____%
ITC Rate _____%

Depreciation:
Method? ACRS _____ S.L. _____
Years _____
Residual Value in Year ____ $ _____
If Sale and Purchase:
ITC Recaptured _____
Depr. Recaptured _____

		C A S H F L O W									
		TAX SHIELD DATA									
YEAR	TOTAL PAYMENTS (1)=(2)+(3)	PRIN (2)	INT (3)	DEPR (4)	TOTAL (5)=3+4	TAX SAVINGS (6)	ITC (7)	REMAINING VALUE (8)	TOTAL (9)=1-6-7+8	PRESENT VALUE FACTORS	P.V. COST OF OWNING
0											
1											
2											
3											
4											
5											
6											
7											
8											
9											
10											

Cost to own $ _____ $ _____

$ _____

COST OF LEASING MACHINERY & COMPARISON WITH OWNING

Terms

Selling Price of Machine $ _____
Investment Tax Credit (ITC) Rate _____ %
ITC To Lessor or Lessee? _____
Security Deposit $ _____

Type of Lease _____
Residual Value in Year ____ $_____
Sale Price of Old Mach. 1/ $_____
Interest Rate on Sec. Dep. _____ %

Lease Payment $_____ / _____
Pre Paid? Yes _____ or No _____
Marginal Tax Rate _____ %
Discount Rate _____ %

CASH FLOWS

YEAR	LEASE PAYMENT (1)	OTHER 2/ (2)	TOTAL LEASE COSTS (3)=1+2	TAX SAVINGS (4)	ITC (5)	REMAINING VALUE (6)	TOTAL (7)=3+4+5+6	PRESENT VALUE FACTORS (7)	PRESENT VALUE COST OF LEASING (8)=6x7
0								1.0	
1									
2									
3									
4									
5									
6									
7									
8									
9									
10									
Cost to: Lease	$						$		$ ✓
Own	$						$		$ ✓

1/ Trade in for a leased machine, is actually a sale of the old machine for tax purposes. Therefore, you must establish a sale price to determine taxable gain. You may also be subject to recapture of ITC.

2/ In Ohio, leased farm machinery is subject to personal property tax and most lease contracts require the lessee to pay any tax.

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Cooperative Extension Service
The Ohio State University

Agricultural Economics
and Rural Sociology
2120 Fyffe Road
Columbus, Ohio 43210
Phone 614 422-6021

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Farm Businesses And ERTA '81

Duvick

Richard D. Duvick
Extension Specialist, Agricultural Economics, OSU

The 1981 Economic Recovery Tax Act (ERTA '81) was signed into law August 13, 1981. This bill is one of the most wide-ranging and complicated tax laws in U.S. history. Much discussion has focused on the tax cuts that individuals will receive over the next few years. These make deferral of income to 1982 and later years a tax strategy of interest to many.

But owners and operators of farm businesses must learn some fundamental new income tax concepts that were enacted in ERTA '81. This article reviews the new provisions on depreciation and investment credit that all farmers must use for 1981 purchases.

New Rules for Depreciation (Recovery)

Assets purchased on or before December 31, 1980, were subject to methods of depreciation that required estimation of years of useful life, salvage value and choice of depreciation method: straight line, declining balance or sum of the year's digits. These assets will continue to be reported according to the pre-1981 rules as long as they remain on your depreciation schedule.

ERTA '81 dramatically altered the methods businesses use to recover the cost of long-lived assets. Nearly all capital and business assets purchased after 1980 must be handled under a system called the Accelerated Cost Recovery System (ACRS).

ACRS establishes specified recovery periods for each type of asset, typically much shorter than the useful life of the item. Instead of assigning a useful life to each depreciable piece of property purchased, the taxpayer simply places each item into one of four cost recovery categories: three-year, five-year, 10-year or 15-year. The system is also audit-proof. Because the useful life of an item is not important to cost recovery, taxpayers will not have to argue with IRS about the useful life of an item.

In addition, salvage value is ignored—a taxpayer now recovers 100 percent of the cost of an item. It makes no difference if it is new or used property. The cost of both are recovered at the same rate.

Furthermore, ACRS utilizes the half-year convention; i.e., for a calendar year taxpayer, all property (except 15-year property) placed in service during the year is considered placed in service on July 1. For example, five-year property purchased for $10,000 and placed in service December 28th qualifies for the *same* first year write off as five-year property purchased for $10,000 and placed in service on January 2. If both are on a five-year straight-line method, the first year's depreciation would be 10 percent or $1,000 for each item. However, cost recovery for 15-year property is based on the number of months the property is in service for the acquisition or disposition year.

The 20 percent additional first-year depreciation was repealed effective December 31, 1980. In 1981 only the ACRS cost recovery is allowed. However, for tax years beginning in 1982, up to $5,000 of purchased trade or business depreciable property can be written off as a current expense. The amount is scheduled to increase in later years. No investment credit is allowed for the cost of qualifying property that's expensed, however. It is subject to recapture as ordinary income, the same as depreciation.

The ACRS system is designed to allow rapid recovery of investment in depreciable assets. The accelerated rates are based on a rapid system of depreciation and incorporate the half-year convention. For example, the ACRS three-year recovery percentages for 1981 are 25 percent in Year 1, 38 percent in Year 2 and 37 percent in Year 3, so 100 percent is recovered in three years. Percentages are scheduled to change in 1985 and 1986 to allow even more rapid recovery during the early years of ownership. In each category, taxpayers may choose a straight line method over the same number of years, or straight line over two longer time periods (Table 1). **These are the only lengths of life that can be used. All property purchased in the same year within each category (except 15-year property) must use the same recovery period.** Once the election is made, it cannot be changed without prior IRS consent as to all property put in service that year.

Table 1: Cost Recovery Categories and Recovery Period with ACRS

Cost Recovery Category	Acres Recovery Period (Years)			
	Fixed Rate	S.L.	S.L.	S.L.
3-Year Property	3	3	5	12
5-Year-Property	5	5	12	25
10-Year Property	10	10	25	35
15-Year Property	15	15	35	45

For example, if you purchased a used tractor and a new grain bin, your former pattern may have been to use a five-year declining balance method on the tractor and a 12-year straight line method on the grain bin. But

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now you must choose one of the four recovery periods and use it for both: five-year accelerated, or five, 12, or 25-year straight line.

The effect of these choices, assuming both the tractor and the grain bin have a depreciable basis of $10,000, is shown in Table 2. Very profitable businesses will probably choose the fixed rate or five-year straight line method to get a fast write off. Businesses in low or zero tax brackets may choose the 12-year straight line method, rather than lose some allowable depreciation. At this time, it appears few farm businesses would choose the 25-year straight line method for five-year property. Even investment in a special purpose agricultural building should have the expectation of being profitable enough to pay off over 12 years, or the investment should probably not be made.

Note that the half-year convention must also be used for straight line cost recovery. So an item on five-year straight line recovers 10 percent of the cost in Year 1, 20 percent in Years 2 to 5 and 10 percent in Year 6. Hence, it actually takes six years to recover the full cost. You also need to think of next year's income because more depreciation accrues in Year 2 than in Year 1.

There is no depreciation deduction allowed in the year of disposition. Thus, if the asset in Table 2 was set up on the accelerated rate but traded in for another tractor in 1984, you would have no depreciation on the original tractor for 1984. You would, of course, get first-year depreciation on the new tractor.

Table 2: Depreciation Possibilities for a $10,000 Asset Eligible for a Five-Year Recovery Period Under ACRS

	ACRS Recovery Period Alternatives							
	Accelerated Rates		5 Years		Straight Line 12 Years		25 Years	
Year	%	$	%	$	%	$	%	$
1981	15	1500	10	1000	4 1/6	416	2	200
1982	22	2200	20	2000	8 1/3	833	4	400
1983	21	2100	20	2000	8 1/3	833	4	400
1984	21	2100	20	2000	8 1/3	833	4	400
1985	21	2100	20	2000	8 1/3	833	4	400
1986	0		10	1000	8 1/3	833	4	400
•					•	•	•	•
•			0		•	•	•	•
•					•	•	•	•
1992					8 1/3	833	4	400
1993					4 1/6	416	4	400
•							•	•
•					0		•	•
•							•	•
2005							4	400
2006							2	200
Years to recover full cost	5		6		13		26	

What types of assets fall into each cost recovery program?

Three-year property includes purchased breeding hogs, autos, pick-up trucks and certain race horses. **Five-year property** includes nearly all farm machinery and equipment; purchased dairy, beef and sheep breeding stock; grain bins; and single-purpose agricultural and horticultural buildings. Fences, feeding floors, silos and tile are all five-year property. **Ten-year property** has little application to agriculture. However, a mobile home for rental or business use would be 10-year property. **Fifteen-year property** includes primarily general purpose buildings. Months of acquisition, not half-year convention, applies here.

Congress continues to be concerned that rapid depreciation not be simply a way to convert ordinary gain to capital gain. Gain recognized on the disposition of three-year or five-year property will be ordinary income—to the extent of prior recovery deductions taken—regardless of whether accelerated or straight line methods are used. Because salvage value is out, all purchased dairy cows, sows, ewes, etc. must recover the entire cost over time. When sold, most or all gain will likely be ordinary income.

On 15-year property, similar recapture takes place if accelerated depreciation is used on non-residential assets; i.e., farm buildings. But only the excess above straight line depreciation is recaptured for residential rental property. And all gain will be capital gain on any 15-year property if the straight line method was used.

The adjusted cost of assets will be determined in the same manner as before. For example, in a trade the basis will be remaining basis of asset traded plus "boot."

In many ways the new system is simpler. However, it is designed for the high-income capital intensive operator. In low income years, farmers will face tough decisions on how to treat new capital purchases.

Investment Credit

The 1981 ERTA retains the 10 percent rate for investment tax credit. However, it ties the credit to the ACRS system: 60 percent of qualified investment is three-year property and 100 percent of qualified investment in five, 10 or 15-year property is eligible for the 10 percent credit. This is equivalent to a 6 percent credit on three-year and 10 percent credit on five, 10 and 15-year property. Apparently 6 percent is the maximum credit possible on three-year property, even though a five or 12-year straight line recovery period is chosen.

Recapture will occur on early dispositions. Assets purchased before 1981 are subject to the time limits and recapture rules in effect at the time of purchase. Assets purchased after 1980 are subject to current rules. Because recapture relates to years held—measured from the day placed in service—be sure to retain proof of date of acquisition and disposition.

Summary

The 1981 ERTA ushers in massive changes in federal tax laws. Farm businesses **must** use the new Accelerated Cost Recovery System—and it applies to all assets purchased in 1981. It provides opportunity to offset more income and reduce taxes. Unfortunately, many Ohio farmers have more concern with paying bills in 1981 than paying taxes.

Tax management and planning may be more important in 1981 than in any other year. Declining tax rates in 1982 and later years makes deferral of income attractive. Those facing substantial losses, but with tax payments in prior years, may also want to defer income to 1982 so as to realize tax refunds through a Net Operating Loss carryback.

All businesses must carefully review these options before deciding whether to use the accelerated or straight-line cost recovery methods for 1981 purchases. The new ACRS system is simpler but also less flexible than the former depreciation rules. As always, management decisions must be based on what's best for the total farm operation, not just tax minimization. Use tax saving opportunities where they fit into the overall farm and financial management plan.